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~~ABSTRACT:~~

ABSTRACT OF THE DISCLOSURE

An electric motor (19) comprises a first part (21) and a second part (23) which are moveable with respect to each other. The first part comprises a foil-shaped insulating substrate (51) on which a plurality of series- connected spiral-shaped patterns (67, 67', 69, 69', 71, 71') of conductor tracks are provided. The second part comprises a permanent magnet unit (73) for generating a magnetic field at the location of the conductor tracks. Said patterns each comprise two main sections (79, 81) with substantially straight, parallel conductor tracks (83, 85) having first ends (89, 93) and second ends (91, 95), and two intermediate sections (97, 99) with curved conductor tracks (101, 103) which respectively mutually connect the first ends of the two main sections and mutually connect the second ends of the two main sections. Said intermediate sections each have a center area (105, 107) respectively halfway between the first ends of the two main sections and halfway between the second ends of the two main sections.

← According to the invention, each of the conductor tracks of the intermediate sections has a width (w , w') which, seen from the first ends of each main section and from the second ends of each main section, respectively, to the center area of the intermediate section, initially increases and subsequently decreases. As a result, a motor stiffness of the electric motor is considerably increased, so that the motor speed is less affected during operation by external mechanical loads exerted on the motor.